

16. NYCTICORAX GRISEUS Linn.

Samarkand. 7 June, 1908.

17. BOTAURUS STELLARIS Linn.

Samarkand. 19 Dec., 1907.

18. CICONIA ALBA Bechst.

This is a summer migrant to the Zarafschan Valley, where it breeds in May, building in the trees and on the minarets and domes of the mosques.

19. TOTANUS CALIDRIS Linn.

Samarkand. 10 Oct., 1907, and 7 June, 1908.

20. GALLINAGO CÆLESTIS (Frenzel).

Samarkand. 25 Oct., 1907.

21. OTIS TARDA Linn.

Bokhara. 7 Nov., 1907. A winter migrant.

22. COTURNIX COMMUNIS Bonn.

A very common summer visitor, but occasionally met with also in winter. The birds are captured in great quantities by the natives, and used for fighting purposes.

XXI.—*On a Collection of Birds from the Dead Sea and North-western Arabia, with Contributions to the Ornithology of Syria and Palestine.* By DOUGLAS CARRUTHERS, F.R.G.S., M.B.O.U.

(Plate IX. and Text-figure 5.)

DURING the journeys which I made in the early part of 1909 to the Dead Sea, the uplands of Moab, and the deserts of North-western Arabia, I formed a small collection of birds, and made a certain number of notes on the ornithology of these little-known countries. Scarcely any work has been done in these districts since Tristram's day, and the range of his explorations extended no further than the Land of Moab. Indeed, I cannot find that any ornithologist has penetrated into the country lying to the south-east, towards the Hedjaz provinces of Arabia.

The region that I traversed (see Map, Plate IX.) comprised the low, hot depression that holds the Dead Sea and sinks to 1300 ft. below the level of the Mediterranean, the extremely rocky precipitous declivities of the Moab Plateau, which form the eastern wall of the depression, the rolling uplands of Moab, which afford a certain amount of pasture, and, lastly, the inner deserts (the stony Hammad and the sandy Nafud) which stretch into the very heart of Arabia.

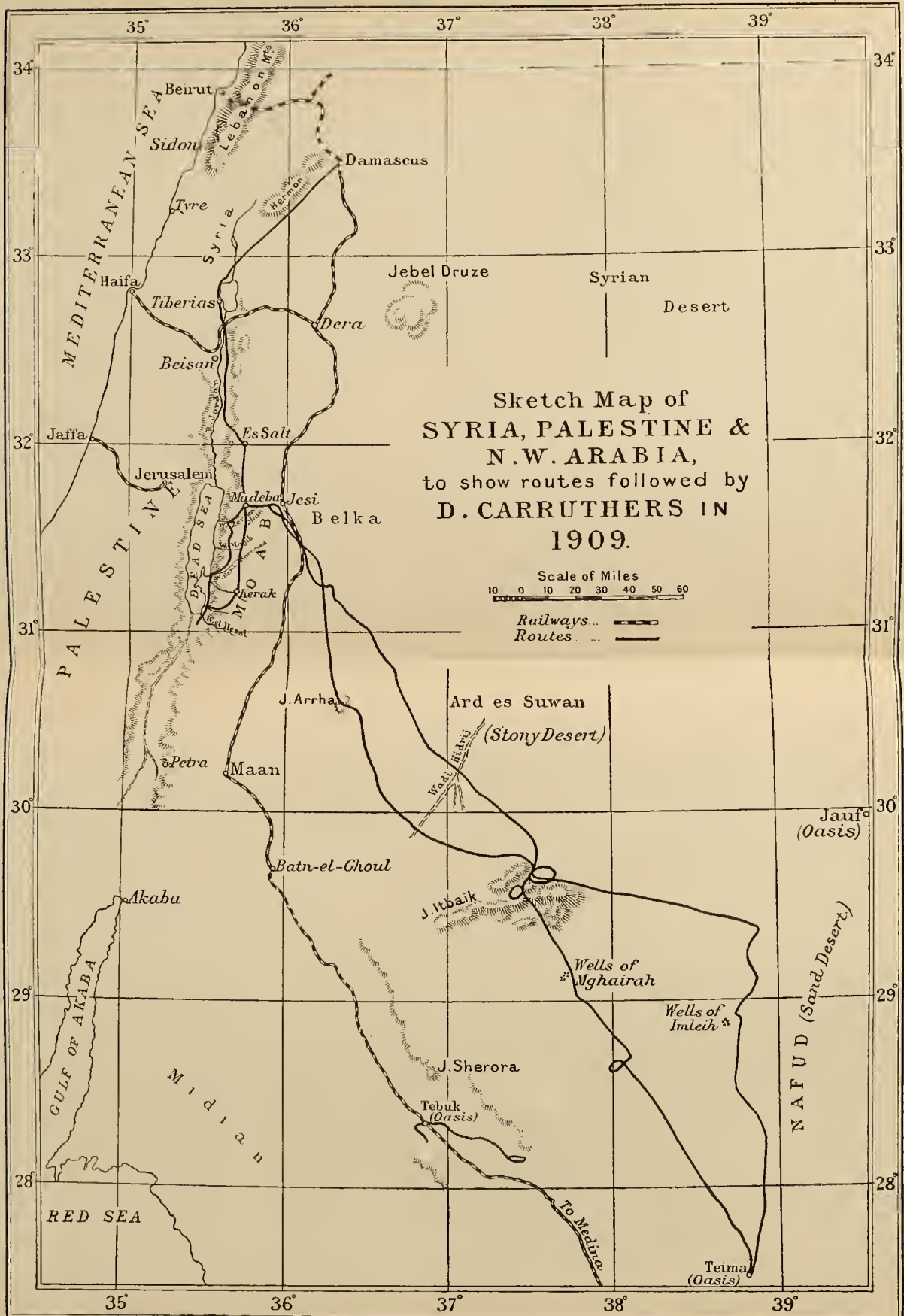
The vegetation of these different zones varies a great deal. In the Dead Sea Basin it is of almost tropical luxuriance; in many places palms, oleanders, and acacias form an impenetrable jungle. In the Ghor es Sarfeh, at the south end of the Dead Sea, there is an especially dense jungle of thorn-scrub, tamarisk, and a tall grass (*Saccharum ægyptiacum*). The wadis that drain into the Dead Sea are also full of growth, but the hills are generally very barren.

The Moab Plateau affords fairly good pasturage for flocks and herds, and is inhabited by a considerable variety of birds and mammals, while the inner deserts are much more sterile and almost uninhabited. The north-western portion of Arabia is composed of limestone steppes, sand-dunes, barren rocky hills, and a few isolated oases.

The altitudes of these different localities vary from -1292 ft. (below the level of the ocean) in the Dead Sea Basin to +3000 ft. on the Moab Plateau. The greater part of N.W. Arabia has an altitude of over 2000 ft.



The great trench which holds the Jordan River and the Dead Sea, being one of the most remarkable physical features in the world, contains an interesting fauna.

The Moab Sparrow (*Passer moabiticus*), for instance, is not only confined to this limited region, but is only found in three little isolated areas of jungle at the most southern and lowest portion of the Depression. This is also the only locality in the Palæarctic Region where a species of the genus *Cinnyris* occurs (*C. osea*), which shews the affinities of the fauna of Palestine to that of the Ethiopian Region. This bird, however, seems to have extended its range out of



Sketch Map of
 SYRIA, PALESTINE &
 N.W. ARABIA,
 to show routes followed by
 D. CARRUTHERS IN
 1909.

Scale of Miles
 10 0 10 20 30 40 50 60

Railways... 
 Routes ... 

the Depression to the coast-region, where it is found from Jaffa to Beirut.

Other remarkable birds, typical of the vicinity of the Dead Sea, are the Fan-tailed Raven (*Corvus affinis*), Tristram's Grackle (*Amydrus tristrami*), the Palestine Bush-Babbler (*Argya squamiceps*), and the Chat-Robin (*Cercomela melanura*).

In January 1909 I made a collection at the Oasis of Tebuk and in the surrounding district. During February and March I travelled over the country which extends from the Dead Sea south-eastwards to the borders of Nejd in Central Arabia. This land was, of course, very poor in bird-life, but two especially interesting observations were made, namely, the occurrence in N.W. Arabia of the Ostrich and of a peculiar Lark (*Ammomanes saturatus*), the latter having hitherto only been recorded from Abyssinia and Southern Arabia. Travel in this region was extremely hazardous, and necessity forced me to journey fast from well to well; thus collecting was almost impossible. Many of the specimens which I preserved were skinned as I rode along on camel-back.

After my return from the desert-region, a journey was made on foot over the rough country that borders the Dead Sea on the east. The hot-springs of Callirhoe in the Wadi Zerka Main were visited, the Wadis Beni Hammad, Numeira, and Hessi were explored, and the jungle-covered shores of the sea itself, at Ghor el Mezreh and Ghor es Sarfeh, were fairly well worked.

The return journey led, *via* Kerak and Madeba, to Salt, and thence, *via* the Jordan Valley, to Tiberias and Damascus.

This collection was made expressly for the museum of the American College in Beirut, and I should advise any member of the British Ornithologists' Union who happens to pass through Syria to make a point of visiting that museum, where he will find a very representative collection of the fauna of Syria and Palestine.

The following list of birds contains the names of those which I obtained on these journeys. Specimens of most of

them were collected and preserved, but in a few cases they were only "observed." References to Tristram's 'Fauna and Flora of Palestine' are added, and quoted as "Tristram, Pal."

There are 54 species enumerated in my List and 4 others in the Appendix. Of these, five are not included in Tristram's work, namely, *Ammomanes cincturus*, *A. saturatus*, *Lanius dealbatus*, *Parus cæruleus*, and *Porzana bailloni*.

1. CORVUS AFFINIS.

Corvus affinis Tristr. Pal. p. 76; Sharpe, Cat. B. iii. p. 46.

a. ♂. Wadi Beni Hammad, E. of Dead Sea. 29 April, 1909.

b. ♀. Wadi Numeira, E. of Dead Sea. 6 May, 1909.

The Fan-tailed Raven is confined, in Palestine, to the Dead Sea region. It is fairly common in the ravines on the eastern side of the Depression, where I have seen a flock of no less than eight together. The birds are also occasionally seen in company with Common Ravens, but are easily distinguished from them by their short, rounded tails, which are very noticeable. They have, moreover, a very different and much more musical cry. I found them nesting on the 28th of April.

2. CORVUS COLLARIS.

Corvus monedula Tristr. Pal. p. 75.

Coleus collaris Sharpe, Cat. B. iii. p. 27.

Jackdaws were very common in the declivities of the Moab Plateau. All the specimens I obtained seemed to belong to the white-collared race of *Corvus monedula*. Tristram also noted this, but did not give specific value to the white-collared variety.

3. AMYDRUS TRISTRAMI.

Amydrus tristrami Tristr. Pal. p. 74.

Hagiopsar tristrami Sharpe, Cat. B. xiii. p. 168.

a. ♂ ; b. ♀. Wadi Hessi, S.E. of Dead Sea. 2 May, 1909.

Large colonies of these birds haunt the rock-gorges in

the wadies that run into the Dead Sea from the east. These specimens were obtained at 1000 ft. below the level of the Mediterranean.

4. *PETRONIA STULTA*.

Petronia stulta Tristr. Pal. p. 68 ; Sharpe, Cat. B. xii. p. 289.

a. ♂. Wadi Zerka Main, E. of Dead Sea. 24 April, 1909.

This bird is fairly common in the rock-country near the Dead Sea, but does not extend far into Arabia proper.

5. *PASSER MOABITICUS*.

Passer moabiticus Tristr. Pal. p. 68 ; Sharpe, Cat. B. xii. p. 321.

a-c. ♂. South end of Dead Sea. 3 May, 1909.

d-f. ♀. „ „ 2 & 3 May, 1909.

This handsome Sparrow is peculiar to the southern coast of the Dead Sea Depression, and, so far, has only been recorded from three localities, namely, at two spots on the S.W. shore, and again in the reed-beds at the S.E. corner of the Sea. Its range is therefore extremely limited.

I found it breeding in some numbers in the jungle that surrounds the mouth of Wadi el Hessa, in the Ghor es Sarfeh. This jungle borders the Dead Sea on the extreme south-east, and is composed of tamarisk and tall reeds, which grow to a height of 15 ft. The Sparrows were not numerous, and were very shy and wild. Their note is sparrow-like, but easily distinguished from that of any other Sparrow. The nests were built at a height of from six feet to twenty feet above the ground, and were placed in the branches of the tamarisk. In the wet swampy places, where men could not walk, the nests were placed low down, but on the hard ground they were built in the topmost slender twigs of the trees. The nests themselves (see text-fig. 5, p. 480) were large structures made of thorny twigs, interwoven very firmly, and the entrance-hole at the top was completely covered over; in fact, no entrance-hole could be distinguished, even at close quarters. Inside, the nest was very deep and

thickly padded with the "down" of the tall grass *Saccharum aegyptiacum*, and occasionally with feathers.

These nests were not built in large colonies, but there were generally three or four placed together.

Text-fig. 5.



Nest of *Passer moabiticus*.

During the first week in May most of the nests contained the full clutches of eggs, which appeared to be only four in

number. But during that week I also noticed some birds building their nests, the males and the females alike taking part in the work.

Out of the numerous clutches of eggs that I took, it was noticeable that three of the same clutch were always alike, whilst the fourth was always different. They measured from 1.9 to 2.1 by 1.3 inches.

6. *ERYTHROSPIZA GITHAGINEA*.

Erythrospiza githaginea Tristr. Pal. p. 70; Sharpe, Cat. B. xii. p. 284.

a. ♂; b, c. ♀; d. Sex doubtful. Tebuk, N.W. Arabia, 1 Jan., 1909.

Large flocks of these Desert Bullfinches used to come to drink at the water-holes near the Oasis of Tebuk.

7. *EMBERIZA HORTULANA*.

Emberiza hortulana Tristr. Pal. p. 71; Sharpe, Cat. B. xii. p. 530.

a. ♂. Wadi Zerka Main, E. of Dead Sea. 24 April, 1909.

8. *ALEMION DESERTORUM*.

Certhilauda alaudipes Tristr. Pal. p. 77.

Alæmon desertorum Sharpe, Cat. B. xiii. p. 519.

a. ♀; b. ♂. Tebuk, N.W. Arabia. 2 Jan., 1909.

This is a somewhat rare bird. I only saw it on two occasions during a journey of many hundreds of miles. The two localities were at the Oasis of Tebuk and on the confines of the Nafud Sand-desert.

9. *OTOCORYS BILOPHA*.

Otocorys penicillata Tristr. Pal. p. 81.

Otocorys bilopha Sharpe, Cat. B. xiii. p. 537.

A few examples of the Algerian Shore-Lark were seen, and one was obtained near a well between the Oasis of Teima and Jauf in North-western Arabia.

10. *MELANOCORYPHA CALANDRA*.

Melanocorypha calandra Tristr. Pal. p. 81; Sharpe, Cat. B. xiii. p. 551.

a. ♂. Madeba, E. of Dead Sea. 22 April, 1909.

Very common in spring and summer on the corn-lands of Moab.

11. CALANDRELLA BRACHYDACTYLA.

Calandrella brachydactyla Tristr. Pal. p. 80; Sharpe, Cat. B. xiii. p. 580.

a. ♂. Madeba, E. of Dead Sea. 22 April, 1909.

12. AMMOMANES DESERTI.

Ammomanes deserti Tristr. Pal. p. 79.

Ammomanes deserti isabellina Hartert, Vög. Pal. Faun. i. p. 223.

a. ♀. Wadi Zerka Main, E. of Dead Sea. 25 April, 1909.

b. ♀. Tebuk, Hedjaz Railway. 1 Jan., 1909.

Fairly common wherever there are rocky hills in desert regions.

13. AMMOMANES CINCTURUS.

Ammomanes cinctura Sharpe, Cat. B. xiii. p. 644.

a, b. ♂. South end of Dead Sea. 1 May, 1909.

c. Sex doubtful. Teima, N.W. Arabia. 1 March, 1909.

The occurrence of this Lark in the Dead Sea Basin makes an addition to the list of Palestine birds. It is easily distinguished from *Ammomanes deserti* by the black edging to the tail.

14. AMMOMANES SATURATUS.

Ammomanes saturatus Grant, Nov. Zool. vol. vii. 1900, p. 249.

a. ♂ ; b. ♀. Tebuk, Hedjaz Railway. 4 Jan., 1909.

This specimen agrees with those obtained in Southern Arabia by the Percival-Dobson Expedition. Mr. Percival states that it is essentially a hill-bird, and is never seen on the plains; but I found it on the northern deserts far away from any hill-country.

As this species has been hitherto only recorded from Abyssinia and S. Arabia, the extension of its range northwards, as far as the Land of Midian, is of interest.

15. CINNYRIS OSEA.

Cinnyris osea Tristr. Pal. p. 63 ; Gadow, Cat. B. ix. p. 53.

A few specimens of this Sun-bird were observed in the Ghor es Sarfeh at the south end of the Dead Sea.

The range of this species is greater than was first believed by Tristram, who recorded it only from the Jordan Depression and from near Mount Carmel. Dr. Merrill (see 'Ibis,' 1903, p. 326) widened the range to include Jaffa, whilst I have obtained it as far south as Petra, between the Dead Sea and the Gulf of Akaba, and as far north as the coast-town of Beirut in Syria. The following authentic cases of its occurrence so far north are of interest.

♂. Beirut, Syria. 8 Sept., 1877.

♀. „ „ 27 Nov., 1880.

♂. Alma, S. of Tyre. 5 April, 1904.

The last specimen I obtained myself ; the others are in the collection of the American College, Beirut.

16. PARUS MAJOR.

Parus major Tristr. Pal. p. 52 ; Gadow, Cat. B. viii. p. 19.

The Great Tit was observed on one occasion in the Wadi el Wali, east of the Dead Sea, on the 28th April, 1909. At that season the young were fully fledged.

17. LANIUS MINOR.

Lanius minor Tristr. Pal. p. 58 ; Gadow, Cat. B. viii. p. 235.

a. ♂. South-eastern shore of the Dead Sea. 1 May, 1909.

18. LANIUS DEALBATUS.

Lanius dealbatus Grant, Nov. Zool. vol. ix., Dec. 1902, p. 458.

a. ♂. Tebuk, N.W. Arabia. 2 Jan., 1909.

19. SYLVIA CONSPICILLATA.

Sylvia conspicillata Tristr. Pal. p. 40 ; Seebohm, Cat. B. v. p. 22.

a, b. ♂. Wadi Mojib, E. of Dead Sea. 29 April, 1909.

The Spectacled Warbler was occasionally met with in the scrub on the open desert and in the dry wadis.

20. SYLVIA ORPHEA.

Sylvia orphea Tristr. Pal. p. 41 ; Seebohm, Cat. B. v. p. 14.

a. ♂. Wadi Zerka Main, E. of Dead Sea. 27 April, 1909.

21. SYLVIA RUEPELLI.

Sylvia rueppelli Tristr. Pal. p. 42 ; Seebohm, Cat. B. v. p. 12.

A few specimens of Rüppell's Warbler were observed in the fruit-trees of the Oasis of Teima on February the 22nd.

22. HYPOLAIS PALLIDA.

Hypolais pallida Tristr. Pal. p. 45 ; Seebohm, Cat. B. v. p. 82.

a. ♂. Wadi Zerka Main. 25 April, 1907.

Very common in the oleander groves in the gorges on the east of the Dead Sea.

23. AEDON GALACTODES.

Aedon galactodes Tristr. Pal. p. 46 ; Seebohm, Cat. B. v. p. 34.

a. ♂. Wadi Zerka Main, E. of Dead Sea. 27 April, 1909.

b. ♂. S. end of Dead Sea. 6 May, 1909.

24. ACROCEPHALUS PHRAGMITIS.

Acrocephalus phragmitis Tristr. Pal. p. 48 ; Seebohm, Cat. B. v. p. 91.

a. ♂. Wadi Zerka Main, E. of Dead Sea. 25 April, 1909.

25. SCOTOCERCA INQUIETA.

Drymæca inquieta Tristr. Pal. p. 50.

Scotocerca inquieta Sharpe, Cat. B. vii. p. 213.

a. ♂. Tebuk, N.W. Arabia. 2 Jan., 1909.

b. ♂. Wadi Mojib, E. of Dead Sea. 29 April, 1909.

c. ♀. Tebuk, N.W. Arabia. 2 Jan., 1909.

d. ♂. Wadi Numeira, E. of Dead Sea. 6 May, 1909.

Fairly common in the scrub on the open desert and in the broken country near the Dead Sea.

26. DRYMÆCA LEPIDA.

Burnesia lepida Sharpe, Cat. B. vii. p. 211.

a. ♂. South end of Dead Sea. 6 May, 1909.

b. ♂. South-east shore of Dead Sea. 1 May, 1909.

c. ♂. Wadi Zerka Main, E. of Dead Sea. 25 April, 1909.

d. ♀. South end of Dead Sea. 6 May, 1909.

These specimens undoubtedly belong to the Indian form of *Drymæca gracilis*, which is the common Wren-Warbler of the maritime plain of Syria and Palestine. *Drymæca lepida* has not been recorded before from these localities, but its occurrence is not unexpected, for it has been obtained in Egypt and at Fao on the Persian Gulf.

27. ARGYA SQUAMICEPS.

Argya squamiceps Tristr. Pal. p. 49; Sharpe, Cat. B. vii. p. 395.

a. ♂. Wadi Zerka Main, E. of Dead Sea. 24 April, 1909.

b, c. ♀. South end of Dead Sea. 1-6 May, 1909.

d. ♀. Tebuk, N.W. Arabia. 2 Jan., 1909.

This Babbler is very common in the wadis on the east side of the Dead Sea, and is also found sparsely throughout North-western Arabia.

28. CERCOMELA MELANURA.

Cercomela melanura Tristr. Pal. p. 35.

Myrmecocichla melanura Seebohm, Cat. B. v. p. 360.

a. ♂; b. ♀. Wadi Zerka Main, E. of Dead Sea. 27 April, 1909.

Apparently the range of this Chat-Robin in Palestine is confined to the rocky gorges in the Dead Sea Depression, where it is most numerous about ocean-level, and does not seem to descend further into the Depression. At this altitude the birds breed early, and by the middle of April the young are fully fledged.

29. SAXICOLA MORIO.

Saxicola leucomela Tristr. Pal. p. 35.

Saxicola morio Seebohm, Cat. B. v. p. 372.

Of this species one specimen was obtained and a few others observed at the well of Mghairah, between the Oasis of Tebuk and Jauf in North-western Arabia.

30. *SAXICOLA LEUCOPYGA*.

Saxicola leucopyga Tristr. Pal. p. 35 ; Seebohm, Cat. B. v. p. 374.

a. ♂ ; b. ♀ imm. ; c. ♀. Tebuk, N.W. Arabia. 1 Jan., 1909.

d. ♂. Wadi Numeira, E. of Dead Sea. 6 May, 1909.

A few of these Chats (both immature with black head and adult with pure white crown and nape) were to be seen haunting the scrub near a well in the open deserts south of Tebuk. I afterwards found a few in the gorges on the east side of the Dead Sea, but they were nowhere numerous.

31. *SAXICOLA MELANOLEUCA*.

Saxicola melanoleuca Tristr. Pal. p. 33 ; Seebohm, Cat. B. v. p. 385.

a. ♂. Belka, E. of Dead Sea. 8 Feb., 1909.

32. *SAXICOLA MÆSTA*.

Saxicola mæsta Tristr. Pal. p. 34 ; Seebohm, Cat. B. v. p. 382.

a. ♂. 150 miles S.E. of Dead Sea. 8 Feb., 1909.

33. *SAXICOLA DESERTI*.

Saxicola deserti Tristr. Pal. p. 33 ; Seebohm, Cat. B. v. p. 383.

a. ♂. Tebuk, N.W. Arabia. 6 Jan., 1909.

34. *PYCNONOTUS XANTHOPYGUS*.

Pycnonotus xanthopygus Tristr. Pal. p. 57 ; Sharpe, Cat. B. vi. p. 135.

a. ♂. Wadi Zerka Main, E. of Dead Sea. 27 April, 1909.

This is a rather rare bird in the country east of the Dead Sea and the Jordan Depression. It descends to the lowest part of the Depression, being found in the Ghor el Mezreh (−1280 ft.).

35. HIRUNDO RUSTICA.

Hirundo rustica Tristr. Pal. p. 61; Sharpe, Cat. B. x. p. 128.

A few Swallows were observed as early as the 16th of February in the desert, near the Oasis of Teima.

36. DENDROCOPUS SYRIACUS.

Picus syriacus Tristr. Pal. p. 85.

Dendrocopus syriacus Hargitt, Cat. B. xviii. p. 225.

a. ♂. Wadi Wali, E. of the Dead Sea. 28 April, 1909.

I saw only a few of these Woodpeckers in the steep gorges that furrow the declivities of the Moab Plateau. Tristram mentions that they never descend into the Jordan Valley, so it is worthy of notice that this specimen was obtained in the Dead Sea Depression just below ocean-level.

37. CYPSELUS AFFINIS.

Cypselus affinis Tristr. Pal. p. 83; Hartert, Cat. B. xvi. p. 453.

In the Oasis of Teima, in N.W. Arabia, I observed two or three examples of the White-rumped Swift in Feb. 1909.

38. CAPRIMULGUS EUROPEUS.

Caprimulgus europæus Tristr. Pal. p. 84; Hartert, Cat. B. xvi. p. 526.

a. ♀. Dead Sea Depression. 2 May, 1909.

39. UPUPA EPOPS.

Upupa epops Tristr. Pal. p. 89; Salvin, Cat. B. xvi. p. 4.

A single Hoopoe was observed on the barren desert north of the Oasis of Teima on the 18th of February.

40. MEROPS PERSICUS.

Merops persicus Tristr. Pal. p. 88; Sharpe, Cat. B. xvii. p. 66.

a. ♀. South shore of Dead Sea. 1 May, 1909.

b, c. ♂. „ „ 6 May, 1909.

d. ♀. „ „ 8 May, 1909.

The Blue-cheeked Bee-eater was only seen in the southern part of the Dead Sea Depression, in the Ghor el Mezreh and

the Ghor es Sarfeh. During three seasons in Syria and Palestine this was the only locality where I came across it.

41. HALCYON SMYRNEENSIS.

Halcyon smyrnensis Tristr. Pal. p. 87; Sharpe, Cat. B. xvii. p. 222.

This is a common bird on the mountain-torrents that flow into the Dead Sea from the east, where it feeds on the shoals of fish that inhabit all those streams.

I never saw the Pied Kingfisher in the vicinity of the Dead Sea, but on the Upper Jordan and on the Sea of Tiberias *Ceryle rudis* is the commoner bird and *Halcyon smyrnensis* the rarer.

42. CURSORIUS GALLICUS.

Cursorius gallicus Tristr. Pal. p. 128; Sharpe, Cat. B. xxiv. p. 34.

a. ♀. Teima, N.W. Arabia. 28 Feb., 1909.

This bird was seen on the deserts near the Oases of Tebuk and Teima.

43. SCOLOPAX RUSTICULA.

Scolopax rusticula Tristr. Pal. p. 132; Sharpe, Cat. B. xxiv. p. 671.

I saw the Common Woodcock on one occasion in the Oasis of Teima.

44. TURTUR COMMUNIS.

Turtur communis Tristr. Pal. p. 120; Salvadori, Cat. B. xxi. p. 396.

This Dove is very common in the oleander groves in the declivities of the Moab Plateau.

45. PTEROCLES ARENARIUS.

Pterocles arenarius Tristr. Pal. p. 122; Grant, Cat. B. xxii. p. 18.

Large flocks of this Sandgrouse were observed in the Belka country in the Land of Moab, but during my three hundred miles' journey to the south-east of that district I never saw any of this species.

46. *PTEROCLES SENEGALLUS.*

Pterocles senegallus Tristr. Pal. p. 122 ; Grant, Cat. B. xxii. p. 14.

At one place in N.W. Arabia, where there was water near the surface, I saw countless numbers of Senegal Sand-grouse. This was at a well between the Oasis of Tebuk and Jauf.

47. *CACCABIS CHUCAR.*

Caccabis chucar Tristr. Pal. p. 123 ; Grant, Cat. B. xxii. p. 113.

a. ♂. Wadi Mojib, E. of Dead Sea. 29 April, 1909.

The Chucar Partridge is found in great numbers in the rough hill-country on the east of the Dead Sea and throughout N.W. Arabia wherever there are hills. On the 27th of April the young were hatched, but the old birds still kept in large coveys and were seldom seen in pairs or singly.

The common native name for the Chucar in Syria is "Hajal," but in the country east of the Dead Sea it is called "Shinnar," whilst the little Sand-Partridge, which is unknown in Syria, is called by the name of "Hajal."

48. *AMMOPERDIX HEYI.*

Ammoperdix heyi Tristr. Pal. p. 123 ; Grant, Cat. B. xxii. p. 125.

a, b. ♂. Wadi Zerka Main, E. of Dead Sea. 25 April, 1909.

c. ♀. Wadi Zerka Main, E. of Dead Sea. 27 April, 1909.

d. ♀. S.E. shore of Dead Sea. 1 May, 1909.

Hey's Sand-Partridge is common in the Jordan Valley and Dead Sea Depression. It is seldom met with above - 500 ft. Its northward range is limited by the region of Beisan, about fifteen miles south of the Sea of Tiberias.

In the Arabian deserts I also found it wherever there were hills, and there it lived at a higher altitude.

The birds breed early in May, and it is noteworthy that even whilst breeding they still retain the habit of going in coveys rather than in pairs. Sometimes they are to be seen in company with the Chucar Partridge.

49. STRUTHIO CAMELUS.

Struthio camelus Tristr. Pal. p. 139 ; Salvadori, Cat. B. xxvii. p. 572.

This Ostrich was observed in one locality in N.W. Arabia, namely in the Wadi Hidrij, a hundred and twenty miles south-east of the Dead Sea. I chanced to ride up to some at fairly close quarters in the rolling black-stone desert, called Ard-es-Suwan by the Beduin. Further to the south-east I occasionally saw traces of them, and on the western sand-dunes of the Nafud I found broken eggs. I also saw their tracks close to the Mecca Railway near the Oasis of Tebuk. I should say that this railway marks the extreme western range of the Ostrich in Arabia. Northwards they do not extend beyond the 31st parallel, and they do not pass into the Syrian Hamad.

APPENDIX.

Specimens of the four species in the subjoined List were not obtained on this journey, but their names are of interest as being new to the List of Syrian Birds. There are examples of them in the Museum at the American College in Beirut.

The main authority on the Ornithology of Syria and Palestine is, of course, Canon Tristram's 'Fauna and Flora of Palestine.' This was supplemented by Dr. Merrill's notes published in 'The Ibis' in 1903 (p. 324). In April 1906, an account of my own collection in Syria was published by Dr. Sclater in this Journal (p. 307) ; and these few additions bring the ornithology of the region up to date.

1. PARUS CÆRULEUS.

Parus cæruleus Gadow, Cat. B. viii. p. 12.

♂. Damascus. 17 Sept., 1904.

♂. „ 18 Sept., 1904.

♂. „ 20 Sept., 1904.

The Blue Tit is resident in the cultivated area round Damascus ; but it seems to have been overlooked, for it has never been recorded hitherto from Syria.

2. SULA BASSANA.

Sula bassana Grant, Cat. B. xxvi. p. 425.

Beirut, Syria. 1 March, 1894.

The occurrence of the Gannet at the eastern end of the Mediterranean Sea is of interest. The nearest locality from which it has been recorded hitherto is the north-west coast of Africa.

A single example was obtained by Prof. A. E. Day, of the American College at Beirut. It is an adult female in fine plumage.

3. PUFFINUS KUHLI.

Puffinus kuhli Salvin, Cat. B. xxv. p. 375.

♀. Beirut, Syria. 11 April, 1878.

♀. „ „ 22 May, 1878.

The Mediterranean Shearwater is not recorded by Tristram in his 'Fauna of Palestine,' but I find that he mentions it in his notes on the Ornithology of Palestine in the 'Ibis' of 1868 (p. 331), under the name of *Puffinus barolii*.

4. PORZANA BAILLONI.

Porzana bailloni Sharpe, Cat. B. xxiii. p. 103.

Karyatein, Syrian desert. 3 March, 1905.

Tristram did not obtain this bird in Syria or Palestine, but suspected its occurrence.

XXII.—*On a Collection of Birds from the South Coast of the Caspian Sea and the Elburz Mountains.* By HARRY F. WITHERBY, F.Z.S., M.B.O.U. *With Field-Notes* by R. B. WOOSNAM, M.B.O.U.

THIS second collection of birds made by Mr. R. B. Woosnam in Persia has been presented, like the first (see 'Ibis,' 1907, p. 74 *et seqq.*), to the British Museum by Colonel A. C. Bailward, with whom Mr. Woosnam travelled. I am again much indebted to the authorities of the British Museum for allowing me to work out this collection—a task which has interested me greatly.